



AF/3634
#32 py 3/19/03
Docket No. 60,130-464
98CIM12

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Chu
Serial No.: 09/326,308
Filed: June 7, 1999
Priority FR 98 08842 Filed: July 9, 1998
Group Art Unit: 3634
Examiner: G. Strimbu
Title: VEHICLE WINDOW ARRANGEMENT HAVING
AN ANGLED OPENING FOR INSERTING A
CABLE END DURING ASSEMBLY

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APPEAL BRIEF

Box AF
Assistant Commissioner of Patents
Washington, D.C. 20231

Dear Sir:

The Notice of Appeal in this application was filed on April 12, 2002. Appellant's original brief was filed on June 7, 2002. The "corrected" brief responsive to the notification of non-compliance mailed September 10, 2002, was filed October 10, 2002. Appellant now submits its "corrected" brief responsive to the notification of non-compliance mailed February 7, 2003.

Real Party in Interest

Meritor Light Vehicle Systems-France LLC is the real party in interest.

Related Appeals and Interferences

There are no related appeals or interferences.

Status of the Claims

Claims 20-27 and 36-43 stand finally rejected. Claims 20-27 and 36-43 were rejected under 35 U.S.C. §112, second paragraph; claims 36-38 were rejected under 35 U.S.C. §102(b); claim 36 was rejected under 35 U.S.C. §102(e); claims 20-25, 36-38 and 41-43 were rejected under 35 U.S.C. §103; claims 20-25, 36-38 and 41-43 were rejected under the judicially created doctrine of obviousness-type double patenting.

Claims 26, 27, 39 and 40 have been indicated as containing allowable subject matter. Despite Appellant's attempts to present those claims rewritten in independent form to obtain allowance of this case, the Examiner has refused to enter any such amendment.

Status of Amendments

Appellant filed a proposed amendment subsequent to the final rejection, which placed the case in condition for allowance because it addressed the §112 rejection raised for the first time in the final office action and included the subject matter indicated by the Examiner as being allowable into the remaining independent claims. Instead of entering the amendment, the Examiner sent an advisory action alleging a separate §112 issue. Appellant attempted to address the Examiner's new concerns by submitting a second proposed amendment after final to change the language that the advisory action focused upon. Another advisory action indicating a *different*, new §112 issue was sent by the Examiner. After a telephone conference with the Examiner, Appellant's representative again submitted a proposed response attempting to address the Examiner's latest alleged concerns under 35 U.S.C. §112 (even though Appellant disagrees with the Examiner that the claims needed any change). The most recent response was submitted by facsimile on April 5, 2002, and then again on April 12, 2002 (because it allegedly was not received at the PTO on April 5). At the time the original appeal brief was filed, Appellant had not received any indication from the Examiner whether that proposed amendment would be entered. Since then, the Examiner has refused to enter that amendment based upon yet another alleged §112 issue, which was not previously detected by the Examiner even though the most recently allegedly problematic language in proposed claim 44 had been before the Examiner in each of the three attempts to correct the alleged problems.

Summary of the Invention

Vehicle door window lifter arrangements typically include at least one cable partially wound about a drum that is rotated to cause the desired movement of the window. A variety of challenges are presented to designers and users of such arrangements. One challenge has been to find an efficient, economical way to facilitate manufacturing the arrangement while facilitating winding an appropriate portion of the cable around the drum during the assembly process. While prewinding a cable has been used, that proves difficult in manipulating the various components and maintaining the appropriate amount of tension on the cable through the manufacturing process.

This invention presents a significant improvement in that it allows for inserting a cable around a portion of the drum for easy manufacture. Additionally, this invention represents an advantageous improvement in that it decreases the overall size of the assembly required to accommodate the cable on the drum (p.2, lines 17-19; p.4, lines 8-17; p.5, lines 6-10).

As shown in Figures 2 and 3, for example, one example embodiment of the invention includes a cable 3 that is wound around grooves on a drum 4. A hood 6 and a support plate 5 support the drum 4. The hood has a sidewall extending along a portion of its length at a first radial dimension. The hood includes a tunnel 13 that is a passage portion having a second, larger radial dimension. The passage portion or tunnel 13 and the drum flange 16 cooperate to guide and support an end 15 of the cable prior to the end 15 being inserted into an opening 17 in the flange 16 from the tunnel side of the flange. The opening 17 and the flange 16 accommodates the end of the cable in a manner that makes installation easier and allows for reducing the overall height of the drum 4 (as prior designs required the end of the cable being supported on the drum itself, which necessitated lengthening the drum) (p.4, lines 8-17; p.5, lines 6-10).

The inventive arrangement includes a guide tunnel established by the cooperation of the hood 6 and the flange 16 for manually inserting an end of the cable 3 during the assembly process so that the end of the cable can pass through the guide tunnel before being received in the opening 17. The illustrated example embodiment includes a ramped surface 18 near the opening 17 to further facilitate cable insertion (p.4, lines 8-23).

Independent claim 20 recites a drum including a flange extending radially outward and having an opening extending axially through the flange. A hood has a sidewall partially

surrounding the drum with the sidewall cooperating with a portion of the drum flange to form an arcuate passage. A second end of the cable is received through the arcuate passage and into the opening in the flange.

Independent claim 36 recites that the hood has a sidewall with a portion at a first radial dimension and a passage portion having a second, larger radial dimension. The passage portion and the drum flange cooperate to form a tunnel that guides and supports an end of the cable prior to the end being inserted into the opening in the flange. The dependent claims on appeal recite various additional structural features.

Issues

Whether the final rejections under 35 U.S.C. §112, which were raised for the first time in the final office action, are warranted when the language of the claims is proper (especially in light of the Examiner's continued refusal to enter any amendment after final addressing the Examiner's changing concerns).

Whether the final rejection under 35 U.S.C. §102(b) is proper when the cited art does not show the claimed combination of a drum and hood where a drum flange and a portion of the hood cooperate to form a passage for guiding the end of a cable at least partially around the drum until the end of the cable is received in an opening through the flange.

Whether the final rejection under 35 U.S.C. §102(e) is proper when the cited art does not show the claimed combination of a drum and hood where a drum flange and a portion of the hood cooperate to form a passage for guiding the end of a cable at least partially around the drum until the end of the cable is received in an opening through the flange.

Whether the final rejections under 35 U.S.C. §103 are proper where there is no suggestion or motivation within the art to make the combinations proposed by the Examiner.

Whether the final rejection under the judicially-created doctrine of obviousness-type double patenting is proper where there is no motivation to make the examiner's proposed combination because there would be no benefit to modifying the primary reference with the teachings of the secondary reference and even if the combination could be made, the result is not the same as Appellant's claimed invention.

Grouping of Claims

The Examiner has already admitted that claims 26, 27, 39 and 40 contain allowable subject matter. Each of those claims stands alone.

Every rejection of claims 20-27 and 36-43 is contested.

Claims 21-27 depend from claim 20.

Claims 37-43 depend from claim 36.

1. The rejection under 35 U.S.C. §112

Every claim stands or falls on its own with regard to the rejections under 35 U.S.C. §112.

2. The rejection under 35 U.S.C. §102(b)

Claims 36-38 were rejected under 35 U.S.C. §102(b). Claim 36 stands alone. Claim 37 stands alone. Claim 38 stands alone.

3. The rejection under 35 U.S.C. §102(e)

Claim 36 is the only claim rejected under §102(e). That claim stands alone.

4. The rejections under 35 U.S.C. §103

Claims 20-25, 36-38 and 41-43 were rejected under §103.

Claims 20 and 21 stand together.

Claims 22-24 stand together but are separately patentable from the other claims.

Claim 25 stands alone.

Claim 36 stands alone.

Claim 37 stands alone.

Claim 38 stands alone.

Claims 41-43 stand or fall together but are separately patentable from the other claims.

5. The obviousness-type double patenting rejection.

Claims 20-25, 36-38 and 41-43 were rejected under the judicially created doctrine of obviousness-type double patenting.

Claims 20 and 21 stand together.

Claims 22-24 stand or fall together but are separately patentable from the other claims.

Claim 25 stands alone.

Claim 36 stands alone.

Claim 37 stands alone.

Claim 38 stands alone.

Claims 41-43 stand or fall together but are separately patentable from the other claims.

Argument

INTRODUCTION

The claims are clear and there is no proper basis for a rejection under 35 U.S.C. §112. The claims are not anticipated because none of the prior art shows the claimed combination. None of the claims are obvious because even the combinations proposed by the Examiner are not the same as Appellant's claimed invention and there is no proper motivation or suggestion within the art to make the Examiner's proposed combinations.

THE CITED REFERENCES

A. United States Patent No. 4,191,060 ("the *Sessa* reference")

The *Sessa* reference discloses a vehicle window glass lifting mechanism that addresses the pre-tensioning problem of the operative wire (or cable) by including a rupturable dowel as stated in column 1 of the *Sessa* reference, the problem addressed by the teachings of that reference was to avoid oversizing the winding device by having a tensioning device incorporated into the glass lifting mechanism, "in which the diameter of the crenellated wheel coupled to the drum through the unidirectional clutch does not exceed the drum diameter." (*Sessa* reference, column 1, lines 58-66.)

The Examiner cites the *Sessa* reference for what is shown in figures 2, 5 and 7 as an unlabeled recess for receiving an end 12 of the cable in the portion 13 of the device. Even that, however, is not the same as the opening in the drum flange recited in Appellant's claims.

Importantly, there is no suggestion or use for a "hood" within the *Sessa* reference and there is nothing in *Sessa* that indicates any particular benefit or usefulness for the unlabeled and undescribed recess that retains the end 12 of the cable.

B. United States Patent No. 4,421,299 ("the *Hess* reference")

The *Hess* reference shows a window cable driving mechanism that has a drum 4 "enclosed by a bracket 6" having bearing surfaces 14, 16 that cooperate with cylindrical rolling surfaces 10 and 12 at the ends of the drum 4. As can be appreciated from the drawings, there must be contact between the bearing surfaces and the rolling surfaces of the drum 4 to be accurately supported in the position required by the *Hess* reference. Because there must be such contact, it is impossible for a passage to be found between those items from within the reference and there is no possible motivation for changing the bracket 6 of the *Hess* reference to make it consistent with a hood providing a tunnel passage as recited in Appellant's claims.

C. United States Patent No. 6,253,491 ("the *Pages* reference")

The *Pages* reference is commonly owned with this application. It discloses a window lifting mechanism arrangement previously developed by the owner of this application but does not include all of the elements of Appellant's claimed invention. The *Pages* reference includes a drum having an opening 21 in the cylindrical body of the drum for receiving an end 19 of the cable. In Appellant's current invention that feature of a drum is eliminated so that the currently claimed invention represents a significant advancement in the art; simplifying the assembly process and reducing the height of the assembly, for example.

THE REJECTIONS UNDER 35 U.S.C. §112 ARE IMPROPER

The Examiner has repeatedly refused to enter an amendment after final that eliminates the §112 issues raised by the Examiner for the first time in the final office action. With each refusal,

the Examiner alleged a different §112 issue. Appellant has repeatedly tried to appease the Examiner in addressing the Examiner's changing concerns (although Appellant disagrees with the Examiner's position). Even though the allegedly problematic language mentioned in each new advisory action was before the Examiner in the first submission after final, the Examiner continues to allege "new" issues that were not raised in the earlier Advisory Action(s).

The Examiner has made several different rejections under 35 U.S.C. §112. In making these rejections the Examiner is either reading into the language of the claims too much and creating hypothetical unclarities or failing to take the entire language of the claims in context, which renders them clear upon proper consideration.

The Examiner rejects claim 20 asserting that the recitation on line 9 of "a second end" of the cable is unclear. Earlier in the claim (line 2) the cable is recited as having two ends. Lines 4-5 recite "one of the cable ends." When one considers the entire claim, it is clear that a cable having two ends necessarily has only two ends and the second end must be the other end (i.e., not the "one of the cable ends" of lines 4-5). The only thing that is unclear is how the claimed "second end" could be confusing to the Examiner since a cable having two ends necessarily has a first end and a second end.

Moreover, Appellant's proposed amendment after final included changing the language of line 9 of claim 20 from "a second end" to --a second one of the two ends--. If claim 20 is otherwise determined to be allowable, which Appellant asserts is the required result, Appellant is still willing to make the amendment to line 9 of claim 20 as has been repeatedly proposed to the Examiner.

Another alleged basis for the §112 rejection is that the Examiner finds it unclear how the end of the cable "is always in the arcuate passage." (Claim 20, line 10). Reading the claim indicates that the end of the cable is not always in the passage. The claim recites that the end of the cable is received "through the arcuate passage and into the opening in the flange." By definition, the word "through" and "into" taken in context necessitate that the claim be interpreted so that the end of the cable does not remain in the passage always but, instead, is received into the opening in the flange (i.e., exits the passage) as recited.

Moreover, Appellant repeatedly attempted to clarify any possible ambiguity by amending line 10 of claim 20 to read, "The cable being first received through the arcuate passage and then

into the opening in the flange from the passage side of the flange.” The Examiner did not indicate any problems with this language in any of the advisory actions. It follows that the proposed amendment eliminated this basis for a rejection under 35 U.S.C. §112. Even though Appellant believes that the claim language as it stands on appeal is appropriate, Appellant is still willing to amend claim 20 as previously proposed if the Board determines that the claim is otherwise allowable.

The next item pointed to by the Examiner is the recitation of “the second axially extending portion” on lines 4-5 of claim 21. Line 2 of claim 21 recited that the hood sidewall includes “a second axial portion that extends between...” The recitation beginning at line 4 of “the second axially extending portion” therefore has antecedent basis in line 2. It is clear from claim 21 that the second axial portion extends, which is synonymous with a second axially extending portion. Reading the entire claim clarifies the alleged issue raised by the Examiner.

The next item raised by the Examiner is the use of the term “respectively” on line 5 of claim 21. Appellant has used the term “respectively” in the common English usage to express the relationship between the claimed combination of the radially extending portion and the drum flange on the one hand and the second axially extending portion and the drum body on the other hand.

In every attempted amendment after final, Appellant willingly proposed a slight modification for clarifying any potential issue with this portion of claim 21 by amending the last two lines of claim 21 to read as follows, “between the radially extending portion and the drum flange and between the second axially extending portion and the drum body [,respectively].” Appellant is willing to make this change to claim 21 if the Board determines that the claim is otherwise allowable.

The next item raised by the Examiner is the recitation of “a sidewall on opposite sides of the ramp” on lines 1-2 of claim 24. The Examiner’s confusion is based upon reading the claim as calling for only a single sidewall. The claim, however, calls for two sidewalls, one on each of the sides of the ramp. This becomes clear when reading the entire claim language, which requires, in relevant part, “a sidewall on opposite sides of the ramp, each sidewall...” The claim is not requiring a single sidewall on both, opposite sides of the ramp.

Appellant proposed amending claim 24 as follows, “a sidewall on [opposite sides] each side of the ramp, each sidewall extending...” The Examiner refused entry of this amendment on other grounds. Appellant is still willing to make those changes to claim 24 once the Board determines that the claim is otherwise allowable.

The last item raised by the Examiner under 35 U.S.C. §112 is the recitation of “a passage portion” on line 7 of claim 36. The Examiner’s reasoning for this alleged difficulty is that it is unclear if the “passage portion is part of the sidewall or in addition to the sidewall.” The issue is a red herring. It does not matter if the passage portion is part of the sidewall or in addition to the sidewall. The claim clearly recites that the sidewall extends “along a portion of the length of the drum body at a first radial dimension.” The claim also recites that the passage portion has “a second, larger radial dimension, the passage portion and the drum flange cooperating to form a tunnel...” It is clear how the passage portion fits within the claimed arrangement. Whether the claimed sidewall terminates at the passage portion or has a section formed to establish the passage portion does not matter. The Examiner is manufacturing an issue that need not be clarified to understand the content of claim 36 and the scope of the protection afforded by that claim.

Notwithstanding Appellant’s disagreement with the Examiner’s position, Appellant did attempt to amend claim 36 so that lines 6 and 7 would read, in relevant part, “a sidewall extending along a portion of the length of the drum body at a first radial dimension, [and] the hood having a passage portion having a second, larger radial dimension...” Upon the Board determining that claim 36 is otherwise allowable, Appellant remains willing to make such a change to claim 36.

Appellant respectfully submits that the language of the claims is clear enough to satisfy the statutory requirements.¹

¹ The Examiner objected to the disclosure for allegedly failing to provide proper antecedent basis for certain language in the claims. The drawings clearly show arrangements as described in the pending claims. While there may not be word-for-word correspondence between the claims and the specification, there is no such requirement in the law. Additionally, Appellant attempted to amend the specification to include word-for-word correspondence with the claims but the Examiner refused to enter the amendment, even though the Examiner raised this objection to the specification for the first time in the final office action. Another objection to the specification is indicated on the first page of the final office action but, as repeatedly pointed out to the Examiner, Appellant made an amendment to the specification filed on February 1, 2001, that corrected the very error that the Examiner contends still exists.

THE REJECTIONS UNDER 35 U.S.C. §102(b) ARE IMPROPER

The Examiner rejected claims 36-38 under 35 U.S.C. §102(b) as being anticipated by the *Hess* reference. The Examiner improperly interprets Figure 1B of the *Hess* reference as including the elements of Appellant's claims 36-38. As pointed out above, the surfaces 12 and 16 in *Hess* (numbered in Figure 1A but not in Figure 1B) must contact each other so that the rolling surface 12 is accommodated by the bearing surface 16 to support the drum within the bracket 6. There is no provision anywhere within the *Hess* reference for spacing between those surfaces and certainly not a tunnel that guides and supports an end of the cable prior to the end being inserted into the opening in a flange as required by Appellant's claim 36. There is no "flange." There is no "tunnel." As such, there cannot be any anticipation.

If the end of the cable were received in the recess 42 in the embodiment of Figure 1B of the *Hess* reference, the bracket 6 would have to be placed onto the drum after the cable was pre-wound onto the drum. There is no correspondence between the elements of the *Hess* reference and the features recited in claims 36-38, which facilitate winding the cable about the drum after the hood is in place.

A. Claim 36 is not anticipated.

Claim 36 is not anticipated by the *Hess* reference as described above. At a minimum, there is no "flange" and no "tunnel" found in the *Hess* reference.

B. Claim 37 is not anticipated.

Claim 37 is not anticipated by the *Hess* reference for the same reasons that claim 36 is not anticipated and further because the dimensional relationships in claim 37 cannot possibly be located within the teachings of the *Hess* reference. *Hess* does not teach a drum flange with "a radial dimension that is approximately equal to the second radial dimension of the passage portion of the hood." These additional recitations render claim 37 separately patentable.

C. Claim 38 is not anticipated.

Claim 38 is not anticipated by *Hess* for the reasons that claim 36 is not anticipated. Further, *Hess* cannot possibly be construed to show the “projections extending from the drum flange in an axial direction...that cooperate with the flange projections such that rotation of the brake box projections causes rotation of the drum.” Quite simply, there are no such projections extending from the drum of the *Hess* reference. Therefore, claim 38 is separately patentable.

THE REJECTION UNDER 35 U.S.C. §102(e) IS IMPROPER

The Examiner rejected claim 36 under 35 U.S.C. §102(e) as being anticipated by the *Pages* reference. As mentioned above, the *Pages* reference does not include a radially extending flange at one end of the drum body portion. Instead, at most, the drum in the *Pages* reference includes an axially extending portion of the cylindrical drum body (not a radially extending flange) that includes an opening 21 for accommodating an end 19 of the cable. Because there is no flange, there is no corresponding “opening in the flange” as required by claim 36. The absence of a radially extending flange from the *Pages* reference and the lack of an opening through the missing flange (both of which are positively recited in Appellant’s claim 36) necessitates that the rejection under 35 U.S.C. §102(e) be reversed.

THE REJECTIONS UNDER 35 U.S.C. §103 ARE IMPROPER

The Examiner has rejected claims 20-25, 36-38 and 41-43 under 35 U.S.C. §103 as being unpatentable over the *Sessa* reference in view of the *Pages* reference. The Examiner contends that it would have been obvious to provide the arrangement of the *Sessa* reference with the hood of *Pages* “to prevent contaminants from getting into the winding drum.” There would be no benefit to adding the hood of *Pages* to the winding drum of the *Sessa* reference. Without any benefit to making a combination, there is no motivation and no *prima facie* case of obviousness. It is axiomatic that there must be a motivation to make the combination. The absence of any motivation here renders the rejection improper.

The Examiner's supposed reason for finding motivation to add the hood of *Pages* is to "prevent contaminants from entering the drum" but even the hood of *Pages* would not do this. As is clear from the drawings in the *Pages* reference, the hood does not completely encircle the drum. It is impossible to conceive, therefore, how the hood would prevent contaminants from entering the drum area.

There is nothing within the *Sessa* reference that indicates it has any need for a hood or that adding a hood would somehow be beneficial. There is nothing within the *Sessa* reference to indicate that it is in need of any modification.

Further, the hood of *Pages* is intended to facilitate guiding the end 19 of the cable through the circular tunnel 16 for manually inserting the end of the cable into the opening 21 of the drum. Because the *Sessa* reference includes the unlabeled recess near the reference numeral 12 in the flange 13, the hood of *Pages* cannot facilitate insertion of a cable end in the arrangement of *Sessa*. The hood of *Pages* would have no use in the arrangement of *Sessa* and there is no motivation for making the combination.

Even if there were proper motivation, which there is not, the Examiner's reasoning would not provide the result that the Examiner suggests. Even if one were to make the combination of the two references, the result is not the same as Appellant's claimed invention. Unless one were to radically redesign *Sessa*, the combination of *Sessa* and *Pages* does not provide the results of Appellant's claimed invention. If one uses the drum of *Pages*, then the opening 21 renders the claimed flange opening redundant at best. If one were to use the drum of *Sessa*, the unlabeled recess near the end 12 of the cable does not constitute an opening in a flange that cooperates with an arcuate passage or a tunnel for guiding the end of the cable into the opening during a winding procedure, which is the arrangement in Appellant's claims. No combination of the cited references results in Appellant's invention as claimed.

A. Claims 20 and 21 are not obvious.

Claim 20 is not obvious over the combination of *Sessa* and *Pages* (or vice versa). As described above, there is no *prima facie* case of obviousness because there is no motivation to make

the combination. Further, even if the references could be combined, there are limitations within claim 20 that cannot be met by the proposed combination.

Claim 20 recites, in part, "A drum...including a flange extending radially outward...including an opening extending axially through the flange" and a hood having a side wall cooperating with a portion of the drum flange "to form an arcuate passage, a second end of the cable being received through the arcuate passage and into the opening in the flange." There is no teaching within the cited references for such a combination. No reference alone or combined with the others provides for such an arrangement.

B. Claims 22-24 are not obvious.

Claims 22-24 contain further recitations that are not found in the improper combination of *Sessa* with *Pages*. Even if claims 20 and 21 could somehow be considered obvious, the additional limitations in claims 22-24 cannot be found in the references and, therefore, give separate patentability to claims 22-24.

Claims 22-24 include more details regarding the opening in the flange and in particular include a ramp that facilitates inserting the end of the cable into the opening in the flange. None of the cited references have anything that can reasonably be considered the same as or suggesting the limitations recited in claims 22-24.

C. Claim 25 is not obvious.

Claim 25 is not obvious over the combination of *Pages* and *Sessa* or the combination of *Sessa* and *Pages* for the reasons described above. Further, claim 25 includes subject matter beyond that stated in claim 20, which cannot be found even if the combination of references were made. Claim 25 recites projections extending from the drum flange in an axial direction that cooperate with brake box projections to provide a desired rotation of the drum. The Examiner does not provide any basis for finding these limitations within the improper combination of *Pages* and *Sessa* or *Sessa* with *Pages*.

The additionally missing limitations from the improper combination proposed by the Examiner, which are positively recited in Claim 25, render Claim 25 separately patentable.

D. Claim 36 is not obvious.

Claim 36 is not obvious in view of the combination of *Sessa* with *Pages* or *Pages* with *Sessa*. As described above, there is no *prima facie* case for either proposed combination. Further, even if either combination were proper, the result would not be the same as the arrangement stated in claim 36.

Claim 36 recites, in part, “A winding drum...having a radially extending flange at one end of the body portion, the flange including an opening.” Claim 36 also recites, “A hood having...a passage portion having a second, larger radial dimension, the passage portion and the drum flange cooperating to form a tunnel that guides and supports an end of the cable prior to the end being inserted into the opening in the flange.” Such an arrangement is not shown within any of the references and even if one were to combine the references as suggested by the Examiner (which Appellant contends cannot be done for the reasons stated above) the result would not be the same as the claimed invention.

E. Claim 37 is not obvious.

Claim 37 recites a particular relationship between the drum flange dimensions and the passage portion of the hood. The particulars of this dimensional relationship are not shown or suggested within even the improper combination of references. If one were to extend out the cover 12 at the portion of the tunnel 16 in the *Pages* reference to be the same radial dimension of the flange of the *Sessa* reference, the guiding feature of that tunnel would be completely lost. If one were to effectively shrink down the flange of the *Sessa* reference to make it the same radial dimension as the tunnel 16 in the *Pages* reference, then the features and operation of the *Sessa* drum would be compromised if not entirely lost. It would no longer be possible to accomplish the objectives of the *Sessa* reference arrangement if that change were made. Therefore, there is even further lacking motivation for making modifications to the cited references to make them consistent with claim 37.

As there is a separate, additional reason why there is no motivation to modify the references to be consistent with Claim 37, the claim is separately patentable.

F. Claim 38 is not obvious.

Claim 38 cannot be considered obvious over the combination of *Sessa* with *Pages* or *Pages* with *Sessa* because there is no *prima facie* case as described above. Further, even if the improper combination were made, neither of the cited references includes projections as recited in claim 38. Therefore, the proposed combination cannot possibly establish the arrangement of claim 38.

G. Claims 41-43 are not obvious.

Claim 41 includes a ramp adjacent to opening in the flange that facilitates insertion of the cable end into the opening. Such a ramp is not found anywhere within the cited references. The inclusion of a ramp in claim 41 makes that claim separately patentable from the independent claim 36. The dependencies of claims 42 and 43 similarly make them separately patentable from claim 36.

THE DOUBLE PATENTING REJECTION IS IMPROPER

The Examiner has rejected claims 20-25, 36-38 and 41-43 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4-6, 8 and 13 of the *Pages* reference in view of the *Sessa* reference. According to the Examiner, it would be obvious to include a flange that extends radially outward further than the grooves “to increase the stability of the drum as it rotates and to prevent the drum from rotating when the vehicle window is at least partially rolled up.” This alleged motivation does not come from the art.

In order to establish a *prima facie* case of obviousness (even in an obviousness-type double patenting rejection) there must be some motivation to modify a reference. There would be no benefit to adding the flange of the *Sessa* reference to the drum of the *Pages* reference and, therefore, there is no motivation to make the proposed combination. The *Pages* reference includes a drum having an opening 21 in the cylindrical body of the drum (i.e., *not* in a radially extending flange). There would be no benefit to adding the flange of *Sessa* because the drum of the *Pages* reference is already situated to accommodate the end of a cable according to the teachings of that reference. Moreover, there is no suggestion that the *Pages* reference needs any flange to increase stability of

that arrangement nor is there any suggestion within the *Sessa* reference that its flange would provide stability to any arrangement, let alone that shown in the *Pages* reference. Nothing in *Pages* suggests that it lacks stability or is otherwise in need of modification.

Apart from that, adding the “flange” of *Sessa* does not make *Pages*’ device any more useable. One could not, for example, readily maneuver the end of a cable into the unlabeled recess near the reference number 12 in the *Sessa* reference by utilizing the hood 12 of the *Pages* reference. Therefore, there is no benefit or motivation for making the proposed combination suggested by the Examiner. The only possible explanation for the proposed combination is found in hindsight, which is not permitted.

Additionally, even if one were to combine the teachings of the *Sessa* reference with the *Pages* reference, the result would not be the same as Appellant’s claimed invention. When you combine those two references (which Appellant submits cannot properly be done as discussed above), the result is not the same as Appellant’s claimed invention. The unlabeled recess in the underside of the *Sessa* device (receiving the cable end 12) is not the same as the claimed opening in the flange. Therefore, the result is not the same as the claimed invention. The *Sessa* reference addresses pre-tensioning issues and is apparently situated to accommodate a pre-wound cable (i.e., not one that would be wound in the manner that is facilitated by Appellant’s claimed invention).

Further, the teachings of the *Sessa* reference are directed toward accommodating gearing within the arrangement to limit the size of the arrangement. There is no discussion of accommodating an end of a cable while winding that cable about a drum. Accordingly, Appellant’s claimed invention addresses a significantly different problem than that in the *Sessa* reference and there is no motivation to use the teachings of the *Sessa* reference in combination with the teachings of the *Pages* reference as suggested by the Examiner.

A. Claims 20 and 21 are not obvious.

Claim 20 is not obvious over the combination of *Sessa* and *Pages* (or vice versa). As described above, there is no *prima facie* case of obviousness because there is no motivation to make the combination. Further, even if the references could be combined, there are limitations within claim 20 that cannot be met by the proposed combination.

Claim 20 recites, in part, "A drum...including a flange extending radially outward...including an opening extending axially through the flange" and a hood having a side wall cooperating with a portion of the drum flange "to form an arcuate passage, a second end of the cable being received through the arcuate passage and into the opening in the flange." There is no teaching within the cited references for such a combination. No reference alone or combined with the others provides for such an arrangement.

B. Claims 22-24 are not obvious.

Claims 22-24 contain further recitations that are not found in the improper combination of *Sessa* with *Pages*. Even if claims 20 and 21 could somehow be considered obvious, the additional limitations in claims 22-24 cannot be found in the references and, therefore, give separate patentability to claims 22-24.

Claims 22-24 include more details regarding the opening in the flange and in particular include a ramp that facilitates inserting the end of the cable into the opening in the flange. None of the cited references have anything that can reasonably be considered the same as or suggesting the limitations recited in claims 22-24.

C. Claim 25 is not obvious.

Claim 25 is not obvious over the combination of *Pages* and *Sessa* or the combination of *Sessa* and *Pages* for the reasons described above. Further, claim 25 includes subject matter beyond that stated in claim 20, which cannot be found even if the combination of references were made. Claim 25 recites projections extending from the drum flange in an axial direction that cooperate with brake box projections to provide a desired rotation of the drum. The Examiner does not provide any basis for finding these limitations within the improper combination of *Pages* and *Sessa* or *Sessa* with *Pages*.

The additionally missing limitations from the improper combination proposed by the Examiner, which are positively recited in Claim 25, render Claim 25 separately patentable.

D. Claim 36 is not obvious.

Claim 36 is not obvious in view of the combination of *Sessa* with *Pages* or *Pages* with *Sessa*. As described above, there is no *prima facie* case for either proposed combination. Further, even if either combination were proper, the result would not be the same as the arrangement stated in claim 36.

Claim 36 recites, in part, “A winding drum...having a radially extending flange at one end of the body portion, the flange including an opening.” Claim 36 also recites, “A hood having...a passage portion having a second, larger radial dimension, the passage portion and the drum flange cooperating to form a tunnel that guides and supports an end of the cable prior to the end being inserted into the opening in the flange.” Such an arrangement is not shown within any of the references and even if one were to combine the references as suggested by the Examiner (which Appellant contends cannot be done for the reasons stated above) the result would not be the same as the claimed invention.

E. Claim 37 is not obvious.

Claim 37 recites a particular relationship between the drum flange dimensions and the passage portion of the hood. The particulars of this dimensional relationship are not shown or suggested within even the improper combination of references. If one were to extend out the cover 12 at the portion of the tunnel 16 in the *Pages* reference to be the same radial dimension of the flange of the *Sessa* reference, the guiding feature of that tunnel would be completely lost. If one were to effectively shrink down the flange of the *Sessa* reference to make it the same radial dimension as the tunnel 16 in the *Pages* reference, then the features and operation of the *Sessa* drum would be compromised if not entirely lost. It would no longer be possible to accomplish the objectives of the *Sessa* reference arrangement if that change were made. Therefore, there is even further lacking motivation for making modifications to the cited references to make them consistent with claim 37.

As there is a separate, additional reason why there is no motivation to modify the references to be consistent with Claim 37, the claim is separately patentable.

F. Claim 38 is not obvious.

Claim 38 cannot be considered obvious over the combination of *Sessa* with *Pages* or *Pages* with *Sessa* because there is no *prima facie* case as described above. Further, even if the improper combination were made, neither of the cited references includes projections as recited in claim 38. Therefore, the proposed combination cannot possibly establish the arrangement of claim 38.

G. Claims 41-43 are not obvious.

Claim 41 includes a ramp adjacent to opening in the flange that facilitates insertion of the cable end into the opening. Such a ramp is not found anywhere within the cited references. The inclusion of a ramp in claim 41 makes that claim separately patentable from the independent claim 36. The dependencies of claims 42 and 43 similarly make them separately patentable from claim 36.

CLAIMS 20 AND 21 ARE ALLOWABLE

Claim 20 is valid under 35 U.S.C. §112. As pointed out above, reading the entire text of the claim eliminates any alleged ambiguities as suggested by the Examiner. The reasons why claim 20 is valid under 35 U.S.C. §112 have been fully described above.

Claim 20 is not obvious over the combination of *Sessa* and *Pages* (or vice versa). As described above, there is no *prima facie* case of obviousness because there is no motivation to make the combination. Further, even if the references could be combined, there are limitations within claim 20 that cannot be met by the proposed combination.

Claim 20 recites, in part, "A drum...including a flange extending radially outward...including an opening extending axially through the flange" and a hood having a side wall cooperating with a portion of the drum flange "to form an arcuate passage, a second end of the cable being received through the arcuate passage and into the opening in the flange." There is no teaching within the cited references for such a combination. No reference alone or combined with the others provides for such an arrangement.

The language of claim 21 is proper under 35 U.S.C. §112 as discussed above. The reasons why the Examiner's rejection of this claim should be reversed are discussed in detail above where the §112 rejection is addressed.

CLAIMS 22-24 ARE ALLOWABLE

Claims 22-24 include more details regarding the opening in the flange and in particular include a ramp that facilitates inserting the end of the cable into the opening in the flange. None of the cited references have anything that can reasonably be considered the same as or suggesting the limitations recited in claims 22-24.

CLAIM 25 IS ALLOWABLE

Claim 25 is not obvious over the combination of *Pages* and *Sessa* or the combination of *Sessa* and *Pages* for the reasons described above. Further, claim 25 includes subject matter beyond that stated in claim 20, which cannot be found even if the combination of references were made. Claim 25 recites projections extending from the drum flange in an axial direction that cooperate with brake box projections to provide a desired rotation of the drum. The Examiner does not provide any basis for finding these limitations within the improper combination of *Pages* and *Sessa* or *Sessa* with *Pages*.

CLAIMS 26 AND 27 ARE ALLOWABLE

The Examiner has indicated that claims 26 and 27 contain allowable subject matter but have been objected to for depending upon a rejected base claim.

CLAIM 36 IS ALLOWABLE

The "passage portion" of claim 36 does not render the claim indefinite. As discussed above, the claim requires a passage portion, regardless of whether it is part of the sidewall or in addition to the sidewall. The language of the claim is proper under 35 U.S.C. §112.

Claim 36 is not anticipated by the *Hess* reference as described above. At a minimum, there is no "flange" and no "tunnel" found in the *Hess* reference.

Claim 36 is not anticipated by the *Pages* reference as discussed above. There is no radially extending flange nor an opening through the missing flange of the *Pages* reference. Claim 36 is not anticipated as already described.

Claim 36 is not obvious in view of the combination of *Sessa* with *Pages* or *Pages* with *Sessa*. As described above, there is no *prima facie* case for either proposed combination. Further, even if either combination were proper, the result would not be the same as the arrangement stated in claim 36.

Claim 36 recites, in part, "A winding drum...having a radially extending flange at one end of the body portion, the flange including an opening." Claim 36 also recites, "A hood having...a passage portion having a second, larger radial dimension, the passage portion and the drum flange cooperating to form a tunnel that guides and supports an end of the cable prior to the end being inserted into the opening in the flange." Such an arrangement is not shown within any of the references and even if one were to combine the references as suggested by the Examiner (which Appellant contends cannot be done for the reasons stated above) the result would not be the same as the claimed invention.

CLAIM 37 IS ALLOWABLE

Claim 37 recites a particular relationship between the drum flange dimensions and the passage portion of the hood. The particulars of this dimensional relationship are not shown or suggested within even the improper combination of references. If one were to extend out the cover 12 at the portion of the tunnel 16 in the *Pages* reference to be the same radial dimension of the flange of the *Sessa* reference, the guiding feature of that tunnel would be completely lost. If one were to effectively shrink down the flange of the *Sessa* reference to make it the same radial dimension as the tunnel 16 in the *Pages* reference, then the features and operation of the *Sessa* drum would be compromised if not entirely lost. It would no longer be possible to accomplish the objectives of the *Sessa* reference arrangement if that change were made. Therefore, there is even further lacking motivation for making modifications to the cited references to make them consistent with claim 37.

Claim 37 is not anticipated by the *Hess* reference for the same reasons that claim 36 is not anticipated and further because the dimensional relationships in claim 37 cannot possibly be located within the teachings of the *Hess* reference.

CLAIM 38 IS ALLOWABLE

Claim 38 is not anticipated by *Hess* for the reasons that claim 36 is not anticipated. Further, *Hess* cannot possibly be construed to show the “projections extending from the drum flange in an axial direction...that cooperate with the flange projections such that rotation of the brake box projections causes rotation of the drum.” Quite simply, there are no such projections extending from the drum of the *Hess* reference.

Claim 38 cannot be considered obvious over the combination of *Sessa* with *Pages* or *Pages* with *Sessa* because there is no *prima facie* case as described above. Further, even if the improper combination were made, neither of the cited references includes projections as recited in claim 38. Therefore, the proposed combination cannot possibly establish the arrangement of claim 38.

CLAIMS 39 AND 40 ARE ALLOWABLE

The Examiner has already admitted that claims 39 and 40 contain allowable subject matter.

CLAIMS 41-43 ARE ALLOWABLE

Claim 41 includes a ramp adjacent to opening in the flange that facilitates insertion of the cable end into the opening. Such a ramp is not found anywhere within the cited references. The inclusion of a ramp in claim 41 makes that claim separately patentable from the independent claim 36. The dependencies of claims 42 and 43 similarly make them separately patentable from claim 36.

CONCLUSION


The Examiner's rejections under 35 U.S.C. §112 raised for the first time in the final office action are not warranted. There is no anticipation by any of the cited references. There is no proper motivation to make the proposed combinations and no *prima facie* case of obviousness under 35 U.S.C. §103 or the judicially created doctrine. Even if there were proper motivation, the result of combining the teachings of the cited references is not the same as Appellant's claimed invention. In summary, there is no basis for not allowing this application.

Every rejection made by the Examiner should be reversed.

Respectfully submitted,

CARLSON, GASKEY & OLDS, P.C.

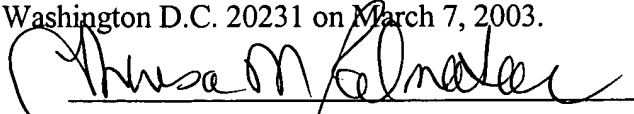
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CERTIFICATE OF MAIL

I hereby certify that the enclosed **Appeal Brief** (in triplicate) is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Box AF, Assistant Commissioner of Patents, Washington D.C. 20231 on March 7, 2003.



Theresa M. Palmateer

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APPENDIX OF CLAIMS

20. A device for raising and lowering a vehicle window, comprising:

a cable having two ends;

a drum having a plurality of grooves on an outer surface of the drum for receiving portions of the cable, a first end of the drum having a receiver that receives one of the cable ends, a second end of the drum including a flange extending radially outward further than the grooves, the flange including an opening extending axially through the flange; and

a hood having a sidewall partially surrounding the drum, the sidewall and a portion of the drum flange cooperating to form an arcuate passage, a second end of the cable being received through the arcuate passage and into the opening in the flange.

21. The device of claim 20, wherein the hood sidewall includes a first axial portion, a radially extending portion and a second axial portion that extends between the radially extending portion and the drum flange and wherein the second end of the cable is received between the radially extending portion and the drum flange and the second axially extending portion and the drum body, respectively.

22. The device of claim 20, wherein the opening in the flange is adjacent a ramp that extends at an angle relative to an axis of the drum.

23. The device of claim 22, wherein the ramp is positioned at an angle of approximately 45 degrees relative to the axis of the drum.

24. The device of claim 22, including a sidewall on opposite sides of the ramp, each sidewall extending in a direction generally parallel to the axis of the drum.

25. The device of claim 20, including projections extending from the drum flange in an axial direction and including a brake box having projections that cooperate with the flange projections such that rotation of the brake box projections causes rotation of the drum.

26. The device of claim 25, wherein the opening in the flange extends into one of the drum flange projections.

27. The device of claim 26, wherein the one drum projection includes an angled ramp surface that is angled relative to an axis of the drum, the angled surface guiding the second end of the cable into the opening.

36. A vehicle window raiser assembly, comprising:

a cable;

5 a winding drum having a body portion that has a plurality of grooves that support a portion of said cable for winding said cable, the drum having a radially extending flange at one end of the body portion, the flange including an opening; and

a hood having a sidewall extending along a portion of the length of the drum body at a first radial dimension and a passage portion having a second, larger radial dimension, the passage portion and the drum flange cooperating to form a tunnel that guides and supports an end of the cable prior to the end being inserted into the opening in the flange.

37. The assembly of claim 36, wherein the drum flange has a radial dimension that is approximately equal to the second radial dimension of the passage portion of the hood.

38. The assembly of claim 36, including projections extending from the drum flange in an axial direction and including a brake box having projections that cooperate with the flange projections such that rotation of the brake box projections causes rotation of the drum.

39. The assembly of claim 38, wherein the opening in the flange extends into one of the drum flange projections.

40. The assembly of claim 39, wherein the one drum projection includes an angled ramp surface that is angled relative to an axis of the drum, the angled surface guiding the second end of the cable into the opening.

41. The assembly of claim 36, wherein the opening in the flange is adjacent a ramp that extends at an angle relative to an axis of the drum.

42. The assembly of claim 41, wherein the ramp is positioned at an angle of approximately 45 degrees relative to the axis of the drum.

43. The assembly of claim 41, including a sidewall on opposite sides of the ramp, each sidewall extending in a direction generally parallel to the axis of the drum.